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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,732	07/16/2003	Michael Weiland	N0169 US	9034

37583 7590 10/05/2004

NAVIGATION TECHNOLOGIES
222 MERCHANDISE MART
SUITE 900, PATENT DEPT.
CHICAGO, IL 60654

EXAMINER

TO, TUAN C

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,732

Applicant(s)

WEILAND ET AL.

Examiner

Tuan C To

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-21 and 26-28 is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-14, 16, 22, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 9-11, 15 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/29/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The length of the proposed abstract is longer 150 words. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-8, 13, 14, 16, and 25 are rejected under 35 U.S.C. 112 (second paragraph) as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-8: The limitations recited in said claims are unclear. The applicant should revise the claim in such a way so that they can clearly define the invention.

Claim 13: The phrase "physical road lane includes a clothoid" recited in claim 13 was held to be indefinite since it was not clear what applicant intended to cover by the recitation "clothoid". *Ex parte Kristensen*, 10 USPQ 2d 1701 (Bd. PA&I. 1989).

Claim 14: The phrase "the geometry of a representation physical road lane includes a spline" recited in claim 14 was held to be indefinite since it was not clear what applicant intended to cover by the recitation "spline". *Ex parte Kristensen*, 10 USPQ 2d 1701 (Bd. PA&I. 1989).

Claims 16, and 25: the applicant recites the following: "the data representations of physical road lanes represent lanes that less than full width". It is unclear to whether the applicant intend to recite each road's width is less than a predetermined value. The applicant should revise the claim or provide explanation in order to define more clearly the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 12, 16, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US 6385536B2) and in view of Kepler (US 20020120397A1).

Claim 1:

With respect to claim 1, the reference to Kimura discloses a navigation system and method for detecting and monitoring lane markers on the road, in which the database (24) shown in figure 1 of Kimura stores route/map data that includes map data, road data, node data, intersection data (Kimura, figure 1; column 8, lines 19-35). According to Kimura the road data is stored in the database (24) is represented by a plurality of links each of which connects adjacent nodes.

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Kimura does not disclose the following: "data indicating what physical features are adjacent to the represented physical road lane on a right side and a left side thereof".

The reference to Kepler has been cited as teaching a system and method for retrieving the physical features such as residential, government, and business listings from a database (Kepler, page 2, paragraphs 0024, 0025, 0031, 0032). Said physical features are also shown on a map display including the indication of the location of each feature (Kepler, figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Kimura to include the teachings as taught by Kepler so that one user who is traveling from a current position to a destination can find not only the recommended route to the destination but also the interested place or building where the user can make a stop as desired.

With regard to claim 12, Kimura discloses that each road is represented by a plurality of link each of which connects adjacent nodes (Kimura, column 12, lines 23-28).

Claim 22:

With respect to claim 22, the reference to Kimura discloses a navigation system and method for detecting and monitoring lane markers on the road, in which the database (24) shown in figure 1 of Kimura stores route/map data that includes map data, road data, node data, intersection data (Kimura, figure 1; column 8, lines 19-35).

According to Kimura the road data is stored in the database (24) is represented by a plurality of links each of which connects adjacent nodes.

Kimura does not disclose the following: "data indicating what physical features are adjacent to the represented physical road lane on a right side and a left side thereof".

The reference to Kepler has been cited as teaching a system and method for retrieving the physical features such as residential, government, and business listings from a database (Kepler, page 2, paragraphs 0024, 0025, 0031, 0032). Said physical features are also shown on a map display including the indication of the location of each feature (Kepler, figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Kimura to include the teachings as taught by Kepler so that one user who is traveling from a current position to a destination can find not only the recommended route to the destination but also the interested place or building where the user can make a stop as desired.

With regard to claim 24, Kimura disclose a navigation and method comprising a computer system, in which the database stores various data including the road lane data (Kimura, figure 1, database 24).

Allowable Subject Matter

During the prior art searching, the examiner has found none of the references discloses the limitations recited in claims 9-11, 15, 17-21, 23, and 26-28. Therefore, claims 9-11, 15, and 23 are objected to as being dependent upon a rejected base claim,

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but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 17-21, and 26-28 are allowable.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/tc

September 18, 2004


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 2004